

Assessment of floor Cleaners on Existing floor Surfaces in Ayodhya District of Uttar Pradesh

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ABSTRACT

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Clean and germ-free floor is crucial for a healthy home environment. Floors accumulate dust, dirt, and bacteria over time, which can lead to allergies and infections if not cleaned regularly. Maintaining a spotless floor reduces the risk of germs spreading, especially in areas where children play. A well-cleaned floor improves the overall hygiene of the home, making it more comfortable and welcoming. A good floor cleaner is essential for maintaining a fresh and hygienic home. It effectively removes dirt, stains, and germs, ensuring a safe environment for the family. Regular use prevents the accumulation of dust and germs. Many floor cleaners also have antibacterial properties, reducing the risk of infections. A clean floor enhances the overall appeal of the home. Choosing the right cleaner based on floor type preserves its shine and durability. The present study was conducted to know the existing floor surface in homes and assessment of various floor cleaners by its user in Ayodhya district. Ayodhya and Faizabad city were selected as area of study and total 120 respondents were interviewed by self-structured questionnaire. The major finding of the present study shows that majority 57.5 percent of respondents belong to the age group between 20 to 30 years, while educational qualification of the respondents was good as more than 50 percent were graduate. Majority of them 54.16 percent belongs to the joint family and most of the respondent 69.16 percent resides in pucca houses. There is verity of flooring materials used by citizen of Ayodhya district majority of them 38.33 percent used tiles as floor surface finishing followed by granite and cemented floor with 21.66 percent and 19.16 percent respectively. The variety of floor cleaners are available in local markets of the district. Among them 'Lizol' was found as most (30.00%) popular floor cleaner. 'Patanjali Gonyle' floor cleaner was the next preferred floor cleaner. During selection of floor cleaner majority of respondents (30.83) were inspired by mass media advertisement with major motive to attain spotless cleaning followed by germfree surface. Finally the different aspects of assessment majority of women respondents (51.66%) were 'satisfied' with their selected floor cleaner.

Keywords: Floors accumulate dust, comfortable, spreading

INTRODUCTION

A clean home not only goes a long way in ensuring a peaceful atmosphere, but it also helps keep family members healthy. It can also provide a higher level of comfort for its inhabitants, both physically and mentally. "Cleaning" is a process of removing stains, dirt, dust, grease and unwanted impurities. It includes mopping, sweeping, scrubbing and washing. The floor area of our house where we spend most of the time, should be clean and germ free. Constant foot traffic, especially in common areas of house as veranda, living room, drawing room, lobby etc. tracks dirt, dust, and other harmful allergens that disrupt the workflow and appeal of the peace. A dirty floor is also a potential health threat to babies, pets, and people with low immunity. The use of suitable floor cleaner play very significant role to improves overall health by reducing germs, mould, and allergens. Floor cleansers and disinfectants are essential requisites for removal of offensive odour, dirt, contaminants and to provide sparkling clean looks. Various

household cleaning products have been developed to facilitate the removal of dust and dirt. Cleaning prevents infections and also improves the appearance of our environment which otherwise becomes the breeding ground for pests and insects such as ants, flies, mosquitoes, cockroaches, spiders etc.

The present study was conducted in Ayodhya and Faizabad city. Acharya Narenrda Dev University of Agriculture and Technology is situated in Ayodhya District of Uttar Pradesh. Ayodhya is a major pilgrimage site for Hindus and known as the birthplace of Lord Ram. With ongoing urbanization and infrastructural improvements, the demand for effective cleaning solutions is increasing. The awareness of families for hygiene and sanitation plays a role in their choice of floor cleaners.

- To identify the existing situation of respondents and the floor type they preferred.
- To know the available brands of floor cleaners in local market and key factors influencing their choice.

Review of literature

Shukla et al., (2022) Disinfectants and cleaners are necessary ingredients to get rid of pollutants, unpleasant Odors, and filth while maintaining a spotless appearance. Numerous cleaning products for the home have been created to make it easier to maintain surfaces, remove dust and filth, and disinfect the space. These are the materials—which are typically liquid in nature—that are used to clean surfaces of dirt, including dust, stains, unpleasant Odors, and clutter. Both eliminating dirt and keeping microorganism levels low are important qualities of a good cleaning product. These elements, however, have the potential to increase the biocide resistance of bacteria like *Staphylococcus aureus*, which is frequently responsible for infections and even MRSA. And this may make it more difficult to eradicate dangerous microorganisms. This article examines the function of Kalon Lear concentrated floor cleaner powder. Its cutting-edge recipe effectively gets rid of stubborn stains without using any dangerous chemicals.

Dubey et al., (2020) Ingredients like disinfectants and cleaners are essential for eliminating Odors, dirt, and contaminants while keeping a clean appearance. Removing dirt and maintaining low microbe levels are critical characteristics of an effective cleaning solution. Everybody has a distinct favorite cleanser because every home has a different method for cleaning its floors. The study was conducted on the residents of Punjab Agricultural University Campus, Ludhiana. College of Community Science and College of Basic Sciences and Humanities, Punjab Agricultural University, total of 120 respondents comprised the sample of study. Data were collected through personal interview with the help of interview schedule.

Sinha et al., (2009) reported that unhygienic places supported by moisture content facilitated maximum microbial growth. Out of many microbial species observed on Nutrient agar plates, *Serratia marcescens*, *E. coli*, *Micrococcus luteus*, *Staphylococcus aureus*, *Pseudomonas aeruginosa* and *Bacillus cereus* were the most frequent. Among the six bacterial species identified, *Serratia marcescens*, *Staphylococcus aureus*, *Pseudomonas aeruginosa* and *Bacillus cereus* were found out to be pathogenic. Lizol and Dettol are surface cleaners recommended by Indian Medical Association, but from the present study it was noted that Dazzle showed maximum antimicrobial activity amongst the various floor cleaners tested by three different techniques.

Staff (2010) reported that chlorinated phenols found in toilet bowl cleaners are toxic to respiratory and circulatory systems. Ethylene glycol found in window cleaners depresses the nervous system. Phenols found in disinfectants are toxic to respiratory and circulatory systems. Petroleum solvents in floor cleaners damage mucous membrane. Perchloroethylene, a spot remover causes liver and kidney damage.

Ascanzi (1996) stated that disinfectants as surface cleaners are generally used to minimize the growth of these microbes on the floor to avoid infections and diseases. Disinfectants are present in commercially available surface cleaners and are responsible for their effectiveness to fight against microbes.

METHODOLOGY

Different regions may have specific cleaning needs based on climatic conditions, availability of resources, and types of flooring commonly used. The present study was conducted in Ayodhya and Faizabad city. The investigator worked at Acharya Narenrda Dev University of Agriculture and Technology, Ayodhya. For the present study total of

120 respondents were interviewed, 60 from Ayodhya and 60 from Faizabad city. Data were collected through personal interview method with the help of interview schedule. The data were analysed for meaningful interpretation using simple percentages and frequency.

RESULT AND DISCUSSION

Table 1: Distribution of respondents on the basis of their demographic profile

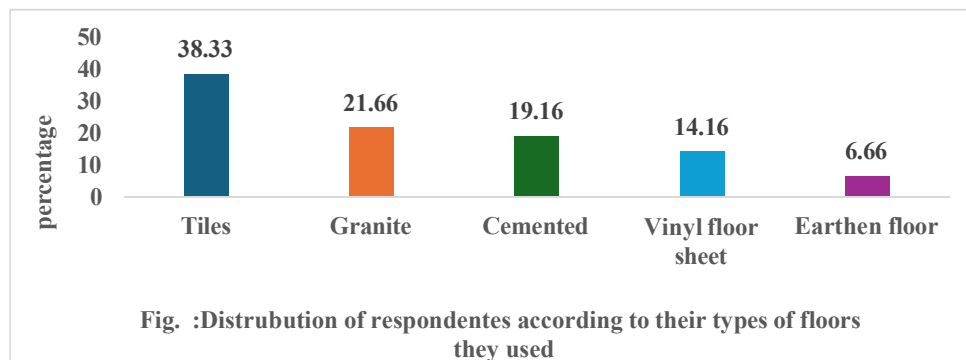
Sl.No.	Demographic Profile	Categories	Frequency	Percentage
1	Age	20-30yrs	69	57.5
		31-40yrs	26	21.66
		41-50 yrs and above	25	20.83
		Total	120	100
2	Education	10 th	13	10.83
		12 th	31	25.83
		Graduate	32	26.66
		Postgraduate	30	25.00
		Other higher degree	14	11.66
		Total	120	100
3	Family Type	Nuclear family	55	45.83
		Joint family	65	54.16
		total	120	100
4	Type Of House	Pucca	83	69.16
		Kutchra	12	10.00
		Mixed type	25	20.83
		Total	120	100

It is evident from table-1 that majority 57.5 percent of respondents involved in floor cleaning activities belongs to the age group of 20-23 years followed by 21.66 percent and 20.83 percent belong to 31-40 years and 41-50 and above age group respectively. It indicates that young women prominently attentive for floor cleaning actively. When we talking about educational qualification of respondents it is clear from the same table that majority 26.66 percent of respondents were graduate and almost same majority that is 25.83 percent and 25.00 percent were passed higher secondary and postgraduate respectively. 11.66 percent were found to have other higher degrees. Data shows that only 10.83 percent respondents were educated upto lower secondary.

The information related to family type, above table shows that 54.16 percent respondents belong to the Nuclear family and about 45.83 percent belong to the joint family. **Pallavi (2023)** also found the similar data that the majority 47.91 percent a nuclear family, 37.05 percent Joint family and 14.58 percent extended family in her study conducted in Ayodhya district. The above table also reveals that the majority 69.61 percent of citizens were have pucca house followed by 20.83 percent pussess mixed type house means they have pucca house as well as some part it as kutchra type. Only 10.00 percent respondent have kutchra houses.

Table 2: Distribution of respondents on the basis of floor types in their homes

Sl. No.	Types of floors	Frequency	Percentage
1	Tiles	46	38.33
2	Granite	26	21.66
3	Cemented	23	19.16
4	Vinyl floor sheet	17	14.16
5	Earthen floor	08	6.66
	Total	120	100



It is evident from the above table-2 that 38.33 percent of respondents have tiles as their floor surface followed by granite, cemented floor and vinyl floor sheet for surface finish with 21.66, 19.16 and 14.16 percent respectively. Here only 6.66 percent were found who have earthen floor surface.

Table 3: Distribution of respondents on the basis of their choice for floor cleaner brand.

Sl. No.	Brands of Floor Cleaner	Frequency	Percentage
1	Patanjali Gonyle floor cleaner	21	17.5
2	Lisol	36	30.00
3	Dettol floor cleaner	16	13.33
4	Mr Muscle Floor cleaner	0	00
5	Domex disinfectant floor cleaner	12	10.00
6	Vim Floor cleaner	02	1.66
7	Harpic floor cleaner	16	13.33
8	Nimyle Eco friendly floor cleaner	10	8.33
9	Phenol liquid	07	5.83
10	Godrej Magic ready to mix floor cleaner	0	00
	Total	120	100

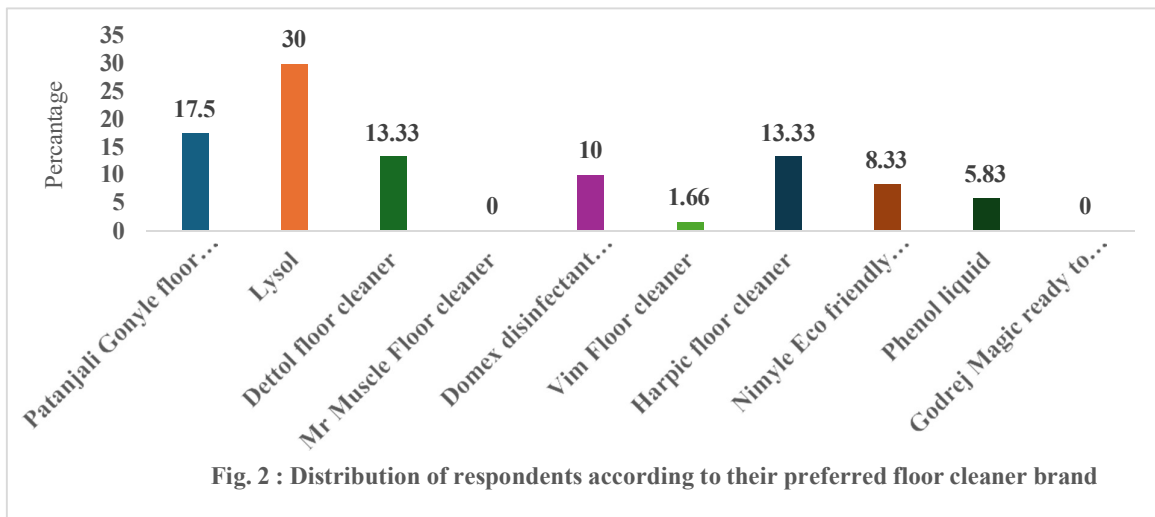


Fig. 2 : Distribution of respondents according to their preferred floor cleaner brand

Above table-3 elaborated that the majority 30.00 percent of homemakers prefer Lysol liquid to clean their floor surface followed by Patanjali Gonyle floor cleaner with 17.5 percent. It is also have been seen that the Dettol floor cleaner and Harpic floor cleaner are equally preferred by women respondents with percentage of 13.33 percent. From the above table It is also clear that Domex disinfectant floor cleaner, Nimyle eco-friendly floor cleaner, and Phenol liquid are chosen by 10.00 percent, 8.33 percent and 5.83 percent respondents respectively. Only 1.66 percent respondents prefer vim floor cleaner to clean the floor surface of their house. Some other brands named as Mr Muscle Floor cleaner and Godrej Magic ready to mix floor cleaner are not well known (0%) by any selected respondents. Similarly, **Dubey et. al. (2020)** reported in her study majority of respondents 82.50 per cent preferred Harpic, followed by Lysol (33.33%), Domex (23.33%) and Phenyl (21.67%). However, less than five per cent of the respondents also showed their preferences for Acid (3.33%), Mr. Muscle (1.67%) and homemade cleansers (4.16%).

Table 4: Distribution of respondents on the basis of source of motivation for selection of floor cleaner brand

Sl. No.	Source of Motivation	Frequency	Percentage
1	Internet	29	24.16
2	Relatives and family members	34	28.33
3	Friends	20	16.66
4	Mass media advertisement	37	30.83
	Total	120	100

Table-4 shows that majority of respondents 30.83 percent are motivated by mass media advertisement as television, radio, newspaper and other print media etc. followed by their relatives and family members positively influence them to select the floor cleaners to their home with 28.33 percent. As present era is known as era of internet and social media, so it is evident from the above table that 24.16 percent respondents motivated by internet. Only 16.66 percent homemakers found who were motivated with their friends.

Table 5: Ranking of the factors as the reason to select the product.

Sl. No.	Reason for Preference	Rank
1	Spotless cleaning	I
2	Germ protection	II
3	Long-lasting	IV
4	Enhance shining	III
5	Fragrance	V

The above table-5 shows the reasons behind selection of floor cleaner ranked by respondents. The 1st rank was given to the motive of 'Spotless Cleaning' of floor by the respondents followed by 'Germ protection', 'Enhancing shining' and 'long lasting' with the rank 2nd, 3rd and 4th respectively. The 5th rank was given to the 'fragrance' left after the use of floor cleaner. After observation of above table it is clear that respondents were fully aware behind the reason of using floor cleaning that is the proper cleaning and germ protection.

Table 6: Distribution of respondents on the basis of opinion for overpriced of floor cleaner brand

Sl. No.	Opinion	Frequency	Percentage
1	Strongly agree	16	13.33
2	Agree	35	29.16
3	Neutral	56	46.66
4	Disagree	13	10.83
5	Strongly disagree	0	00
	Total	120	100

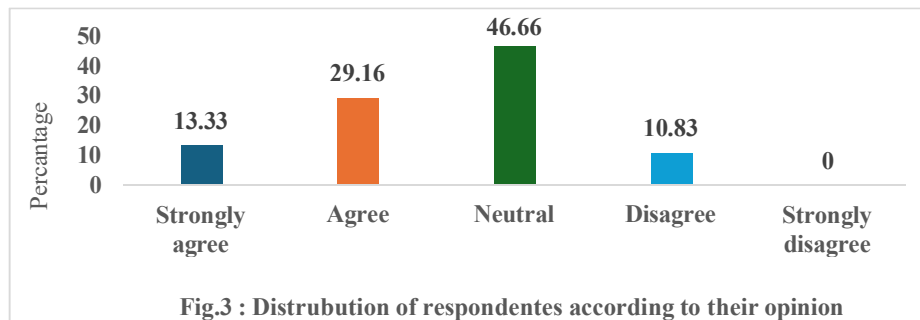
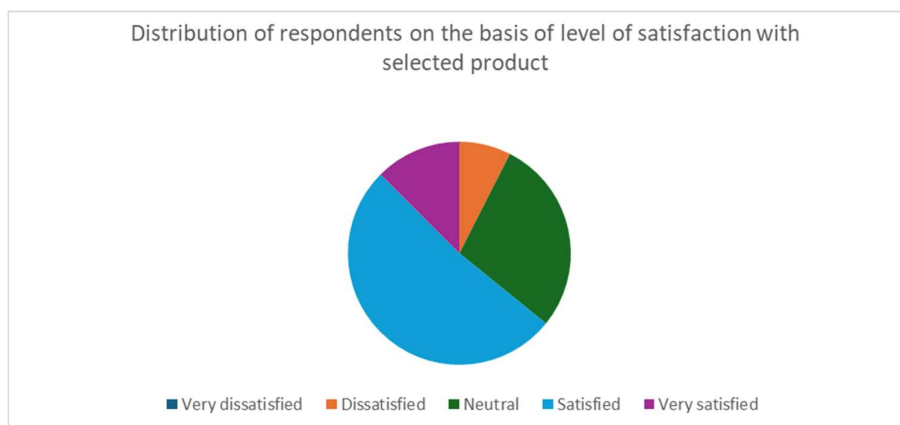


Table-6 reveals the opinion of respondents for their selected product that may be overpriced. Majority 46.66 percent respondents were found as they have neutral opinion for its price. Which indicate that they were not able to decide whether their selected product is overpriced or not. 29.16 percent women agreed with the opinion of overpriced of the selected product followed by 13.33 percent were strongly agreed with the product is overpriced. Only 10.83 percent respondents disagree to the opinion of overpriced of their selected product. No respondent was found with opinion of strongly disagree for overpricing of their selected product which indicate that every one wants right product on the right price.

Table 7: Distribution of respondents on the basis of level of satisfaction with selected product

Sl. No.	Level of satisfaction	Frequency	Percentage
1	Very dissatisfied	00	0.0
2	Dissatisfied	09	7.50
3	Neutral	34	28.33
4	Satisfied	62	51.67
5	Very satisfied	15	12.5
	Total	120	100



It is clear from the above table and pie graph majority 51.66 percent of homemakers were 'satisfied' with their selected floor cleaner followed by 28.33 percent were 'neutral' or not able to judge whether they were satisfied or dissatisfied with overall criteria of their selected product. There were 12.5 percent respondents find who are 'very satisfied' with selected floor cleaner, whether 7.5 percent respondents reported 'dissatisfaction' and no one found who was 'very dissatisfied' with their selected product.

CONCLUSION

A good floor cleaner is essential for maintaining a fresh and hygienic home. It effectively removes dirt, stains, and germs, ensuring a safe environment for the family. The key findings of the study reveal that a significant proportion 57.5 percent of respondents belong to the 20-30 age group. Their educational background is strong, with over 50 percent holding a graduate degree. Additionally, 54.16 percent live in joint families, and a majority (69.16%) of respondents reside in pucca houses. In Ayodhya district, residents use a variety of flooring materials, with tiles being the most common choice (38.33%), followed by granite (21.66%) and cemented floors (19.16%). The local market offers a range of floor cleaners, with Lizol emerging as the most popular (30%), followed by Patanjali Gonyle. When selecting a floor cleaner, the majority (30.83%) were influenced by mass media advertisements, aiming for spotless and germ-free surfaces. In terms of satisfaction, most of the women respondents (51.66%) were satisfied with their chosen floor cleaner.

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